

RE: Chattooga River Sample Request

Holland, Victor <victor.holland@ncdenr.gov>

Fri 2/3/2017 9:32 AM

NORTH CAROLINA

To: McArthur, Chris <mcarthur.christopher@epa.gov>;

Cc: Fleek, Eric <eric.fleek@ncdenr.gov>; Hopkins, Marion <Hopkins.Marion@epa.gov>;

Categories: Record Saved - Shared

1 attachments (313 KB)

Chattooga Data Tables.pdf;

Hi Chris,

The attached data tables were sent to Mr. Floyd per his request. All river segments sampled rated Excellent based on EPT sampling metrics with the exception of Norton Mill Creek. That tributary is less than three square miles and therefore could not be assigned a bioclassification as other EPT samples in waterbodies greater than three square miles (SOP, NCDEQ 2016). Streams less than three square miles that would otherwise rate Excellent, Good, or Good-Fair are reported as Not Impaired. Based on these Excellent bioclassifications in the sampled sections of the Chattooga River and Not Impaired status of Norton Mill Creek, we could not detect effects of increased sedimentation. Thanks.

Victor Holland
North Carolina Department of Environmental Quality
Biological Assessment
Phone: 919 743 8478

Mailing Address:
NC Division of Water Quality
1621 Mail Service Center
Raleigh NC 27699-1621

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: McArthur, Chris [mailto:mcarthur.christopher@epa.gov]
Sent: Friday, February 03, 2017 8:32 AM
To: Holland, Victor <victor.holland@ncdenr.gov>; Fleek, Eric <eric.fleek@ncdenr.gov>
Cc: Hopkins, Marion <Hopkins.Marion@epa.gov>
Subject: RE: Chattooga River Sample Request

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Victor/Eric,

We have been asked to look into this issue further. Has your analysis/report been finalized? If so, could we get a copy?

Thank you,

Chris

Christopher J. McArthur, P.E.
Environmental Engineer
Data Information and Analysis Section
U.S. Environmental Protection Agency Region 4
61 Forsyth Street, SW, Atlanta, GA 30303
Phone: (404) 562-9391
email: mcArthur.christopher@epa.gov



From: Holland, Victor [<mailto:victor.holland@ncdenr.gov>]
Sent: Thursday, November 03, 2016 2:48 PM
To: Fleek, Eric <eric.fleek@ncdenr.gov>
Cc: McArthur, Chris <mcArthur.christopher@epa.gov>
Subject: RE: Chattooga River Sample Request

Chris, Please see below for trailhead and benthic sites recently sampled. There is a place to park at the trailhead.

Chattooga R Trailhead 35.065025, -83.122108
Chattooga R off Chattooga R Trail benthic site 10, 35.04995, -83.11851
Chattooga R off Chattooga R Trail benthic site 8, 35.044139, -83.122347
Chattooga R off Chattooga R Trail benthic site 6, 35.04055, -83.12494

Victor Holland
North Carolina Department of Environmental Quality
Biological Assessment
Phone: 919 743 8478

Mailing Address:
NC Division of Water Quality
1621 Mail Service Center
Raleigh NC 27699-1621

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From: Fleek, Eric
Sent: Thursday, November 03, 2016 2:36 PM
To: Holland, Victor <victor.holland@ncdenr.gov>

Cc: 'McArthur, Chris' <mcarthur.christopher@epa.gov>
Subject: FW: Chattooga River Sample Request

Victor, could you hook up Chris with the access and site locations for the benthos samples on the Chattooga please?

From: McArthur, Chris [<mailto:mcarthur.christopher@epa.gov>]
Sent: Thursday, November 03, 2016 2:34 PM
To: Fleek, Eric <eric.fleek@ncdenr.gov>
Subject: RE: Chattooga River Sample Request

That is a little further than I was expecting, but we might be game especially if the weather is nice. Yes, please provide some site info and access info if its not too much trouble?

Looking forward to the meeting.

Christopher J. McArthur, P.E.
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From: Fleek, Eric [<mailto:eric.fleek@ncdenr.gov>]
Sent: Thursday, November 03, 2016 2:31 PM
To: McArthur, Chris <mcarthur.christopher@epa.gov>
Subject: RE: Chattooga River Sample Request

We sampled for benthos and fish.
It's about a 10 mile roundtrip hike if you want to walk from the bottom of our sampling sites to the top though.
If you are game, I can get you site info and access info (etc).

From: McArthur, Chris [<mailto:mcarthur.christopher@epa.gov>]
Sent: Thursday, November 03, 2016 2:27 PM
To: Fleek, Eric <eric.fleek@ncdenr.gov>
Subject: FW: Chattooga River Sample Request

Eric,

Just curious if you ever made it to this site for monitoring? Marion and I are thinking of stopping by on our way to SWPBA. Any recommendations?

- Chris

Christopher J. McArthur, P.E.

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From: Kroeger, Steve [<mailto:steve.kroeger@ncdenr.gov>]
Sent: Friday, May 20, 2016 10:50 AM
To: McArthur, Chris <mcarthur.christopher@epa.gov>
Subject: FW: Chattooga River Sample Request

Chris –
FYI
--Steve
919-743-8409

From: Fleek, Eric
Sent: Friday, May 20, 2016 10:44 AM
To: Kroeger, Steve <steve.kroeger@ncdenr.gov>; Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Hill, Tammy <tammy.l.hill@ncdenr.gov>; Fleek, Eric <eric.fleek@ncdenr.gov>
Subject: RE: Chattooga River Sample Request

We will certainly be doing some benthos sampling later this summer and I will certainly give Chris and Marion a heads up before we schedule it solidly.
Still a long ways out (like mid-September).

From: Kroeger, Steve
Sent: Friday, May 20, 2016 9:47 AM
To: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Hill, Tammy <tammy.l.hill@ncdenr.gov>; Fleek, Eric <eric.fleek@ncdenr.gov>
Subject: FW: Chattooga River Sample Request

Cyndi and Tammy: FYI – This was discussed this morning with our call with Chris McArthur.

Eric – If you do sampling here, please let Chris McArthur and Marion Hopkins (EPA Region 4) know where and when. Chris is unfamiliar with our sampling methods and wants to learn about our sampling methods.

Thanks!

--Steve

From: McArthur, Chris [<mailto:mcarthur.christopher@epa.gov>]
Sent: Friday, May 20, 2016 9:42 AM

To: Kroeger, Steve <steve.kroeger@ncdenr.gov>
Subject: FW: Chattooga River Sample Request

FYI

Christopher J. McArthur, P.E.
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Phone: (404) 562-9391
[email: mcArthur.christopher@epa.gov](mailto:mcArthur.christopher@epa.gov)



From: Hopkins, Marion
Sent: Thursday, May 19, 2016 1:12 PM
To: McArthur, Chris <mcArthur.christopher@epa.gov>
Subject: FW: Chattooga River Sample Request

Looks like they got this covered... I've offered our help anyway; will see what she says.

From: Behm, Pamela [<mailto:pamela.behm@ncdenr.gov>]
Sent: Thursday, May 19, 2016 12:09 PM
To: Hopkins, Marion <Hopkins.Marion@epa.gov>
Subject: FW: Chattooga River Sample Request

Marion,

Just wanted to update you on DWR response to Bill Floyd's comments. We have requested a study from the Water Sciences Section and as you can see in Heather's email below, the group will be going out to assess the situation. Apparently, Mr Floyd still has concerns, but I think this is a first step. We will see what we get from the special study and go from there. I know he's been calling you, I wanted you to be aware of what we are doing on our end.

Thanks,
Pam

From: Patt, Heather
Sent: Wednesday, May 18, 2016 4:26 PM
To: Behm, Pamela <pamela.behm@ncdenr.gov>
Subject: FW: Chattooga River Sample Request

Here you go... Eric has said his group can do 2-3 samples most likely above and below Norton Mill Creek and one below Green Creek and then resampling the HB7 in Norton Mill Creek. Mr. Floyd is concerned that DWR's sampling will not be sufficient to capture the sedimentation issue and is worried that once we sample the State will take no further action. I talk to him on a weekly basis too.

Heather Patt
Basin Planner

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heather.patt@ncdenr.gov

<http://deq.nc.gov/about/divisions/water-resources/planning/basin-planning>



Nothing Compares

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North Carolina Public Records Law and may be disclosed to third parties.*

From: Patt, Heather

Sent: Friday, May 13, 2016 2:02 PM

To: Fleek, Eric <eric.fleek@ncdenr.gov>; Tracy, Bryn <bryn.tracy@ncdenr.gov>

Cc: Karoly, Cyndi <cyndi.karoly@ncdenr.gov>; Mcmillan, Ian <ian.mcmillan@ncdenr.gov>; jeff.manning
<jeff.manning@ncdenr.gov>; 'Bill Floyd' <wcbfloyd@ix.netcom.com>

Subject: Chattooga River Sample Request

Hi Eric & Bryn,

Please find attached a request for a special study in the Chattooga River, along with supporting documents provided by Bill Floyd regarding degraded trout habitat conditions in the Chattooga. If there is anything else you need in this request please let me know.

Reminiscence of my days of doing salmon redd counts in the PNW, I would be happy to help with your sampling if you need extra bodies.

~Heather

Heather Patt
Basin Planner

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heather.patt@ncdenr.gov

<http://deq.nc.gov/about/divisions/water-resources/planning/basin-planning>



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RE: Chattooga River Sediments

Hopkins, Marion

Fri 4/28/2017 1:07 PM

Sent Items

To: McArthur, Chris <mcarthur.christopher@epa.gov>; Petter, Lauren <Petter.Lauren@epa.gov>;

Categories: Record Saved - Shared

I guess just turbidity or TSS data. I'll search through Mr. Floyd's files – I don't think there is any turbidity data in there but I'll check. I haven't looked in STORET.

From: McArthur, Chris

Sent: Friday, April 28, 2017 11:05 AM

To: Petter, Lauren <Petter.Lauren@epa.gov>; Hopkins, Marion <Hopkins.Marion@epa.gov>

Subject: RE: Chattooga River Sediments

I'd like a better understanding of what data is needed and what is available and then maybe we can explain that to Mr. Floyd.

Christopher J. McArthur, P.E.

Environmental Engineer

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Phone: (404) 562-9391

email: mcarthur.christopher@epa.gov



From: Petter, Lauren

Sent: Friday, April 28, 2017 11:00 AM

To: Hopkins, Marion <Hopkins.Marion@epa.gov>; McArthur, Chris <mcarthur.christopher@epa.gov>

Subject: RE: Chattooga River Sediments

I agree that unless we have data there isn't anything we can do at this point.

Lauren Petter, Environmental Scientist

Water Quality Standards Section

Water Protection Division

Phone: (404) 562-9272

From: Hopkins, Marion

Sent: Friday, April 28, 2017 9:50 AM

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To: McArthur, Chris <mcarthur.christopher@epa.gov>
Cc: Petter, Lauren <Petter.Lauren@epa.gov>
Subject: RE: Chattooga River Sediments

Chris – The NC turbidity numeric standards haven't changed from what is in the Appx 3 you referenced – 10 NTU is the number for trout streams. The narrative stuff probably hasn't changed that much either. If I recall correctly, we've recognized NC for going above and beyond WQS (303c) requirements by including all those bits about buffers, etc. in their standards. Along those lines, I don't think EPA can 'enforce' that part of the standards.

Looping Lauren in here in case she wants to weigh in. Lauren – we spoke briefly about this issue. Bill Floyd is asking EPA to list a section of the Chattooga because of embedded sediments (in part because the Forest Service has allowed kayakers to trample the banks; also I think he is claiming other, unknown sources of sediments). Mr. Floyd has mentioned possibly invoking anti-deg requirements.

Unless we have turbidity data (or biology or other parameters with numeric criteria) that indicates impairment, I don't see that EPA 303d has a role.

From: McArthur, Chris
Sent: Friday, April 28, 2017 9:26 AM
To: Hopkins, Marion <Hopkins.Marion@epa.gov>
Subject: RE: Chattooga River Sediments

Marion,

This may be out of date, but it is what I found on criteria:

<https://www.epa.gov/wqc/developing-water-quality-criteria-suspended-and-bedded-sediments-sabs>

Appendix 3 has the criteria for each state including NC.

Christopher J. McArthur, P.E.
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email: mcarthur.christopher@epa.gov



From: Hopkins, Marion
Sent: Friday, April 28, 2017 9:19 AM
To: McArthur, Chris <mcarthur.christopher@epa.gov>
Subject: Fw:

Here's the SEDS report I scanned yesterday. Thanks for reminding me about this - I'll touch base next week after I catch up on Mr. Floyd's emails.

RE: Chattooga River Degradation and Section 303(d)

McArthur, Chris

Wed 5/24/2017, 11:08 AM

Petter, Lauren; Hopkins, Marion; Decker, Chris

Reply all |

Record Saved - Shared

Label: Permanent (Capstone approach) (Never) Expires: Never

Spoke to Decker. We will try and flush out the macro invertebrate a little more.

From: McArthur, Chris

Sent: Wednesday, May 24, 2017 9:00 AM

To: Petter, Lauren <Petter.Lauren@epa.gov>; Hopkins, Marion <Hopkins.Marion@epa.gov>

Subject: RE: Chattooga River Degradation and Section 303(d)

I'll check in with Decker on the macro invertebrates.

Christopher J. McArthur, P.E.

Environmental Engineer

Data Information and Analysis Section

U.S. Environmental Protection Agency Region 4

61 Forsyth Street, SW, Atlanta, GA 30303

Phone: (404) 562-9391

email: mcarthur.christopher@epa.gov

From: Petter, Lauren

Sent: Wednesday, May 24, 2017 8:11 AM

To: Hopkins, Marion <Hopkins.Marion@epa.gov>; McArthur, Chris <mcarthur.christopher@epa.gov>

Cc: Baschon, Carol <Baschon.Carol@epa.gov>

Subject: RE: Chattooga River Degradation and Section 303(d)

Looping in Carol because of the antideg/listing case in Florida...It may just be a matter of being careful in a response to Mr Floyd when referencing antideg and the assessment of this waterbody.

The positive news for the waterbody is that the data that is available seems to support that for the measured parameters the water quality is comparable to that from 1988. The only question might be what about the 12 of 17 rare species found in 1988, since sediment can be one of the factors affecting biology. However, that could just mean adding that question to the discussion for talking with NC about further investigation and criteria development, as opposed to being enough information to list. Or if we

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feel their macro sampling is sensitive to sediment then that could answer the question before it is asked in response to what has been written so far.

Lauren Petter, Environmental Scientist
Water Quality Standards Section
Water Protection Division
Phone: (404) 562-9272

From: Hopkins, Marion
Sent: Tuesday, May 23, 2017 4:56 PM
To: McArthur, Chris <mcarthur.christopher@epa.gov>
Cc: Petter, Lauren <Petter.Lauren@epa.gov>
Subject: RE: Chattooga River Degradation and Section 303(d)

Chris,
You are amazing!! This is exactly what I needed to respond to Mr. Floyd's comments.

We should discuss at some point how to approach the state with the suggestion to develop a method to assess outstanding fish habitat. Looping Lauren into this in case this becomes an anti-deg issue too.

Marion

From: McArthur, Chris
Sent: Tuesday, May 23, 2017 8:46 AM
To: Hopkins, Marion <Hopkins.Marion@epa.gov>
Subject: RE: Chattooga River Degradation and Section 303(d)

Marion,

I read through Mr. Floyd's extensive comments (100+pages) and some of his enclosures. Mr. Floyd argues that the Chattooga River has been measurably degraded from excessive bedded sediments and no longer supports its Outstanding Resource Waters (ORW) designation and should therefore be included in the State's 303(d) list. He also points out that there should be an assessment methodology developed for bedded sediments to protect that habitat uses of the river. I reviewed some of the historical documents regarding the ORW designation as well as the recent monitoring data/reports. Being new to the whole standards world, here are my thoughts:

The State's designated use for the Chattooga River is B;Tr;ORW. Outstanding Resource Waters (ORW) is a supplementary water quality classification. To be classified as ORW, a water body must exhibit one of more of the following values or uses to demonstrate it is of exceptional state or national recreational or ecological significance:

1. There are outstanding fish (or commercially important aquatic species) habitat and fisheries;
2. There is an unusually high level of water-based recreation or the potential for such recreation;
3. The waters have already received some special designation such as a North Carolina or National Wild and Scenic River, Native or Special Native Trout Waters or National Wildlife Refuge, which do not provide any water quality protection;
4. The waters represent an important component of a state or national park or forest; or
5. The waters are of special ecological or scientific significance such as habitat for rare or endangered species or as areas for research and education.

Additionally, the waters shall have exceptional water quality while meeting the following conditions:

1. That the water quality is rated as excellent based on physical, chemical, or biological information;
2. The characteristics which make these waters unique and special may not be protected by the assigned narrative and numerical water quality standard.

The basis for the ORW classification according to the 1988 ORW Evaluation, was based on excellent water quality (chemical and biological monitoring), outstanding trout habitat, major water-based recreation (trout fishing), designation as federal wild and scenic river, proximity to a USFS "experimental forest", and presence of rare or unusual invertebrate species. I'm assuming then that this could be considered the narrative criteria for ORW in addition to the criteria for the class B and trout water classification. Based on that assumption, I've tried to address the criteria below:

Excellent Water Quality – Chemical

Water quality data was collected in January 1988 in support of the ORW classification. Two stations were located along the Chattooga River and shows very good water quality with low conductivities, high dissolved oxygen, and low nutrients. Turbidity was also measured at less than 5 NTU. North Carolina does not maintain any ambient water quality monitoring stations in this watershed and no data is available in STORET as far back as 2000 (excluding Cashiers Lake). However, as part of a September 2016 study, NC DWR collected physico-chemical samples at eight stations. Results were similar to the 1988 study. State criteria for dissolved oxygen were met for trout waters (6.0 mg/l) and as well as for pH. Turbidity was not measured. Although limited, there is no physical/chemical data to indicate that the waterbody is not meeting class B;Tr standards.

Excellent Water Quality – Biological

Benthic Macroinvertebrate samples were collected in January 1988 in support of the ORW classification. The two stations on the Chattooga River indicated Excellent water quality. NC DWR sampled four stations along the Chattooga River in September 2016. All four stations resulted in a bioclassification of "Excellent." An additional two stations sampled in 2014 also resulted in a bioclassification of "Excellent." There is therefore no biological data indicating that the waterbody does not continue to exhibit exceptional water quality.

Outstanding Trout Habitat

There is no numerical or narrative guidance in the North Carolina Administrative Code as to what defines "Outstanding Fish Habitat and fisheries." The 1988 ORW Evaluation stated that areas had outstanding trout habitat in the river and several tributaries, but did not describe what constituted that habitat. Habitat discussion was limited to a statement that, "the naturally sandy substrate in all Chattooga River tributaries, plus the high gradient of these streams, interferes with the natural reproduction of all three trout species." Fish surveys in 1988 classified (using an outdated method) the Chattooga River as a Class A or B river. Class A streams represent high quality wild trout streams capable of sustaining a fishery through natural reproduction alone. Class B streams represent intermediate quality wild trout streams incapable of sustaining a fishery through natural reproduction alone, except under light fishing pressure. Sampling of eight stations by North Carolina in September 2017 resulted in Class B and A classifications as well as one station as Class C with an overall classification of Class B. Therefore, the data supports the conclusion that Chattooga continues to support outstanding fisheries at least as well as it did when designated ORW. However, it may be prudent for the State to pursue development of suspended and bedded sediment water quality criteria to maintain the fish habitat uses of these waters.

Supporting Rare or Unusual Species

The 1988 ORW Evaluation identified many rare or uncommon invertebrate species in the Chattooga River. Five of the 17 rare species identified in 1998 were again observed in 2016. Therefore, it appears that at least some uncommon species continue to be supported by the water quality.

Conclusion

Based on the State's designated use and standards, there is no data to support listing of the Chattooga River. However, there is also little to no guidance on how to assess impacts to 'outstanding fish habitat.' It may be worthwhile to discuss with the State development of suspended and bedded sediment water quality criteria for the protection of ORW. This may be the most appropriate way to address Mr. Floyd's concerns.

Hope this helps and let me know if you'd like to discuss.

- Chris

Christopher J. McArthur, P.E.
Environmental Engineer
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61 Forsyth Street, SW, Atlanta, GA 30303
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email: mcarthur.christopher@epa.gov

From: Hopkins, Marion
Sent: Thursday, February 02, 2017 12:29 PM
To: McArthur, Chris <mcarthur.christopher@epa.gov>
Subject: FW: Chattooga River Degradation and Section 303(d)
Importance: High

fyi

From: Bill Floyd [<mailto:wcbfloyd@ix.netcom.com>]
Sent: Saturday, January 14, 2017 1:36 PM
To: Hopkins, Marion <Hopkins.Marion@epa.gov>
Cc: wcbfloyd@ix.netcom.com
Subject: Chattooga River Degradation and Section 303(d)
Importance: High

Ms. Hopkins,

Having not heard from you in response to my recent inquiries, please note the importance of my gaining access to EPA Region 4's guidance about how embedded sediments on the Chattooga should be evaluated for impairment and antidegradation purposes.

As you know from our attenuated email communication last April 15-18, 2016, the Chattooga's headwaters were classified Outstanding Resource Water ("ORW") in 1989. As evidenced by North Carolina's 1989 Report of Proceedings, and the North Carolina Administrative Code, preserving the *outstanding innate reproductive capacity* of the Chattooga's in stream trout habitat and preserving the streams *outstanding* eastern brook, rainbow, and brown trout fisheries *constitute specifically designated subcategories of the river's ORW water quality use*.

Consequently, per EPA antidegradation guidance, there is no de minimus exception for non-temporary degradation of these ORW water quality uses. These uses must be fully protected from any degradation. Unfortunately, excessive embedded sediments have *measurably* degraded the Chattooga's once *outstanding* in stream trout habitat and once *outstanding* eastern brook, rainbow, and brown trout fisheries. Unfortunately, this antidegradation mandate has been misunderstood or entirely misapplied by both federal and state agencies.

To press the point, the Chattooga constitutes 1 of just 3 streams, out of over 12,000 bodies of NC water that simultaneously carry Class B, Trout, ORW, and National Wild and Scenic River designations. Similarly, there are only 39 streams in North Carolina that carry Class B, Trout, and ORW water quality classifications. Obviously, intense water quality protection must be afforded to the Chattooga. Unfortunately, the Chattooga has fallen between the regulatory cracks and has not been provided with the requisite level of protection.

This informs why the United States Environmental Protection Agency ("EPA") should add an extended reach of the Chattooga's headwaters to North Carolina's 2016 Section 303(d) list. This also explains why I seek a teleconference with EPA Region 4 to gain a greater appreciation for what the EPA perceives must be done by both federal and state agencies to honor their discrete and nondiscretionary obligation to prevent any degradation of our Outstanding National Resource Waters ("ONRW"). 40 C.F.R. §131.12(a)(3).

The EPA and North Carolina have a joint obligation to assemble and evaluate all existing and readily available information evidencing water quality degradation. 40 C.F.R. § 130.7(b)(5).

It's quite clear from EPA guidance in other regions of the country that the problem of suspended and bedded sediments (as applied to the impairment of salmonid inhabited cold water streams) ought to be evaluated using assessment methodologies specifically geared to measuring excessive embeddedness by fine particle sized sediments (<2mm in diameter).

In fact, EPA Region 10 has endorsed the use of a *minimum effects threshold* for assessing the negative impacts of embedded sediments on salmonids and for determining when a body of water should be placed on the Section 303(d) list of impaired waters. North Carolina presumably has an equivalent duty to use all existing and readily available information concerning possible water quality degradation—including using a *minimum effects threshold* for fine particle sized sediments. Unfortunately, North Carolina has not applied an appropriate assessment methodology for recognizing the impairment caused by excessive embeddedness of fine particle sized sediments.

In fact, North Carolina's narrative based standard only addresses the broader Aquatic Life Use, not the specifically designated subcategories of the Chattooga's ORW water quality uses.

North Carolina's reliance on this insufficiently narrow standard has allowed the excessive embeddedness plaguing the Chattooga's in stream trout habitat to fall between the regulatory cracks. North Carolina's narrative standard has also been improperly applied to deny any degradation because of this excessive embedded sedimentation.

What remains to be determined is why the United States Forest Service and state regulatory agencies have repeatedly neglected to honor the antidegradation protections owed to the Chattooga's specifically designated subcategories of ORW water quality use.

To narrow my comments about EPA's pending additions to North Carolina's 303(d) list, I hope to gain a better understanding of the interpretive knowledge that you possess regarding how excessive embedded sediments should be evaluated for the purposes of the North Carolina's 2016 Section 303(d) list.

Consequently, would it be possible to teleconference with appropriate officials from EPA Region 4, as soon as possible?

Applying any reasonable *minimum effects threshold*, the Chattooga suffers from excessive embedded sediments.

Similarly, the EPA should take notice that the United States Forest Service has caused incremental degradation of the Chattooga's in stream trout habitat by causing additional sediments to be *impermissibly* channeled into an already stressed stream. Consequently, these incremental increases in sedimentation are neither innocent nor innocuous.

Similarly, the USFS promotion of the unregulated construction of a crazy quilt of whitewater paddler boat launch sites, river evacuation points, and portage trails, has degraded North Carolina's trout buffer while creating new unpermitted point sources of sedimentation. This has been going on since 2012—all under the Forest Service's erroneous claim that any damage is so small as to remain unsanctionable.

As the EPA knows, the United States Forest Service is compelled to comply with "all Federal, state, ...and local requirements...respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity." Section 313 of the Clean Water Act; 33 U.S.C. §1323(a). Similarly, the Wild and Scenic Rivers Act compels "the head of any agency administering a component of the national wild and scenic rivers system *shall cooperate with ...the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.*" 16 U.S.C. §1283(c) (emphasis added).

The Forest Service's contributions of additional sediments were documented and brought to its attention in 2014. Unfortunately, despite being made aware of the degradation that its management initiatives have caused to the Chattooga's specific subcategories of ORW water quality use, the Forest Service has done nothing to abate these violations.

The original objective of my involvement was to generate support within the respective federal and state agencies for eliminating this excessive embeddedness and for marshalling the necessary financial resources needed to abate this problem. However, until September 2016, this effort met a stonewall of collective agency denial and attempts to delegitimize those efforts to have this degradation recognized.

Ms. Hopkins, are you advised of the field assessments *finally conducted* by NC DEQ during September 2016—almost 2 years after the problem was presented to it? This augurs another reason why we should speak: to determine your level of knowledge in this regard. In closing, even

if the EPA declines to teleconference, I would appreciate the courtesy a response to this email. If there are substantive circumstance about which I might be unaware, could you please advise?

Thank you for your consideration of these pressing water quality concerns, and my contention that the responsible agencies need to list some portion/segment of the Chattooga's degraded headwaters on the Section 303(d) list of impaired waters.

I look forward to the possibility of working with the EPA to bring a collaborative and effective solution to this special water quality concern.

Bill Floyd

From: Bill Floyd [<mailto:wcbfloyd@ix.netcom.com>]
Sent: Thursday, January 12, 2017 10:50 AM
To: hopkins.marion@epa.gov
Cc: wcbfloyd@ix.netcom.com
Subject: FW: Public Notice of EPA Decision to Add 72 Waterbody-Pollutant Combinations to North Carolina's 2016 Section 303(d) List
Importance: High

Ms. Hopkins,

Just checking to see if you have had an opportunity to consider my request for a brief teleconference. I have several questions regarding the approach of EPA Region 4 regarding SABs.

I look forward to hearing from you.

Regards

Bill Floyd

From: Bill Floyd [<mailto:wcbfloyd@ix.netcom.com>]
Sent: Sunday, January 01, 2017 1:54 PM
To: hopkins.marion@epa.gov
Cc: wcbfloyd@ix.netcom.com
Subject: Public Notice of EPA Decision to Add 72 Waterbody-Pollutant Combinations to North Carolina's 2016 Section 303(d) List
Importance: High

Ms. Hopkins

Last spring, you contracted me very briefly about my written complaint about impermissible water quality degradation of the Chattooga's Outstanding Resource Waters. This was briefly described in comment offered to NC's draft 303(d) list.

I continue to believe that portions of this body of water constitute water quality limited segments, owing to excessive amounts of embedded sediments that exceed any reasonable minimum effects threshold for impacts on salmonids.

I would like to have an opportunity to discuss those concerns in some level of detail.

Would it be possible for EPA Region IV to devote some time and resources to this continuing issue of water quality degradation on 1 of just 3 streams out of over 12,000 in NC to carry Class B, Trout, ONW, and National Wild and Scenic River designations?

Please advise how that might be possible to facilitate my offering additional comments to the EPA's subject notice.

Many thanks.

Bill Floyd

RE: FYConsideration and Regional decision on approp action:
EPA Promulgated Guidance: "Information Concerning 2016 Clean
Water Act Sections 303(d), 305(b), and 314 Integrated Reporting
and Listing Decisions"

Fullagar, Jill

Wed 2/28/2018 6:11 PM

NORTH CAROLINA

To: Hopkins, Marion <Hopkins.Marion@epa.gov>;

Categories: Record Saved - Shared

Hi Marion,

For 2010 Oregon assessed very little data. They only looked at 4 or 5 parameters, I think, so we had to do all the rest, and ended up adding over 950 listings. They had previously done some bioassessment analysis, and while they determined there were waters that were impaired, they put them in Cat 3, not Cat 5, so we had to move them. For the 2012 list, they pretty much only did D.O., so we're doing all the rest, including bioassessment, and are adding about 350 waters this time. Let me know if you have other questions, and I'll let you know how my call with Mr. Floyd goes, when I reach him. Thanks!

jill

Jill Fullagar, Impaired Waters Coordinator
Watershed Unit, Office of Water and Watersheds
US EPA, Region 10
1200 Sixth Avenue, Suite 900 (OWW-192)
Seattle, WA 98101-3140
(206) 553-2582, (206) 553-1280 (fax)
fullagar.jill@epa.gov

From: Hopkins, Marion

Sent: Wednesday, February 28, 2018 7:27 AM

To: Fullagar, Jill <Fullagar.Jill@epa.gov>

Subject: Re: FYConsideration and Regional decision on approp action: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Thank Jill,

Did I understand correctly that OR's list that year did not include a consideration of much (if any) bio data, which was one reason for the Region to produce the list? I'm trying to compare that situation

6

with NC, which has a fairly strong biological monitoring program (benthos, fish community and fish tissue). A large portion of their listings are for impaired biology.

marion

From: Fullagar, Jill

Sent: Tuesday, February 27, 2018 8:09 PM

To: Hopkins, Marion

Subject: RE: FYConsideration and Regional decision on approp action: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Hi Marion,

I went back and looked at what we did in OR in 2010. We did add 31 sedimentation listings. I've attached the methodology we used (page 13). Below is the comment we received and our response to it. All of this was on our website, so Mr. Floyd likely saw it and wants to talk about it. I'll let you know how our conversation goes after I've spoken with him. Let me know if you have any other questions about it. Thanks!

jill

Sedimentation

Commenter (15) noted that in the EPA's proposal to add 31 new water bodies on the basis of sediment, the EPA introduces the Relative Bed Stability (RBS) method (Kauffman 1999). The EPA applies this calculated metric, along with percentage of substrate less than 2 mm diameter, to data gathered via the EMAP project. We do not believe that use of RBS using data gathered at EMAP's spatial and temporal resolution is technically justified for the purpose of describing reach-level impairment. The EMAP sampling process is designed to characterize conditions at large (regional) spatial scales. The validity of using the data gathered for this purpose to assigning impairment to a particular stream reach is untested and highly suspect. Further, the 'reference site' data used by ODEQ do not, so far as we know, include any temporal variability estimates. Therefore it is problematic to compare data taken in 'assessment reaches' in one year with data from 'reference reaches' from different year(s). The relevance of RBS in describing impacts to beneficial uses will require much more work before the technique can be reliably applied as proposed. Fortunately, data from Oregon State University's Watersheds Research Cooperative are uniquely suited for just such a test of the RBS method. We recommend the EPA work with OSU to pursue this work. For now, we request that the EPA remove any proposed water body listings that are based on the RBS methodology.

The EPA used both % sand and fines and Relative Bed Stability (RBS) to assess impairments due to sediment. Using both parameters is an appropriate approach as it provided two lines of evidence. The Environmental Monitoring and Assessment Program (EMAP)/ODEQ field sampling methods and reference condition determination process are adequate for site-scale assessment purposes. RBS is based on EMAP-style data collection methods and has been used in many assessments in which the condition of individual stream reaches is evaluated for inclusion in an assessment of the overall condition of streams at larger geographic scales (basin, state or nations). The following are a list of studies that support the EPA's use of RBS:

- Kaufmann, P. R., P. Levine, et al. "Quantifying physical habitat in wadeable streams." EPA/620/R-99/003. U.S. Environmental Protection Agency. Washington, D.C. 1999;

- Kaufmann, P.R., D.P. Larsen, and J.M. Faustini, "Bed Stability and Sedimentation Associated With Human Disturbances in Pacific Northwest Streams." J. Am. Water Resources Assoc. 45(2):434-459. 2009; and
- Kaufmann, P.R., J.M. Faustini, D.P. Larsen, and M.A. Shirazi. "A Roughness-Corrected Index of Relative Bed Stability for Regional Stream Surveys." Geomorphology 99:150-170. 2008.

RBS and EMAP concepts and methodology are published and have been broadly applied for about 20 years; therefore we do not consider them preliminary or experimental. The use of appropriately classified reference sites to compare and assess the conditions at specific sites is also a well-established approach and the regional reference approach is probably the best (and in many cases the only) way to evaluate whether site-specific conditions are "typical" or "natural." Temporal variability estimates for the sediment indicators within and across years can be found in the three Kaufman studies above and:

- Stoddard, J. L., D. V. Peck, A. R. Olsen, D. P. Larsen, J. Van Sickle, C. P. Hawkins, R. M. Hughes, T. R. Whittier, G. Lomnický, A. T. Herlihy, P. R. Kaufmann, S. A. Peterson, P. L. Ringold, S. G. Paulsen, and R. Blair. Environmental Monitoring and Assessment Program (EMAP): Western Streams and Rivers Statistical Summary. EPA 620/R-05/006, U.S. Environmental Protection Agency, Washington, DC. 2005.

Jill Fullagar, Impaired Waters Coordinator
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fullagar.jill@epa.gov

From: Hopkins, Marion
Sent: Tuesday, February 27, 2018 12:47 PM
To: Fullagar, Jill <Fullagar.Jill@epa.gov>
Subject: Re: FYConsideration and Regional decision on approp action: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Thorough is definitely right. The plethora of documents he dug up were pretty amazing. Did I mention he's a retired lawyer?

I could probably share them with you via OneDrive if you're interested. :)

From: Fullagar, Jill
Sent: Tuesday, February 27, 2018 3:44 PM
To: Hopkins, Marion
Subject: RE: FYConsideration and Regional decision on approp action: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Wow. He's thorough and provided a lot more documentation than what I usually get from the public. Let me take a look at what we said to OR and what we did, and I'll let you know. Thanks for sending this. It gives me an idea where he'll be coming from and what sort of info he'll be looking for. Thanks.

jill

Jill Fullagar, Impaired Waters Coordinator
Watershed Unit, Office of Water and Watersheds
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fullagar.jill@epa.gov

From: Hopkins, Marion
Sent: Tuesday, February 27, 2018 12:27 PM
To: Fullagar, Jill <Fullagar.Jill@epa.gov>
Subject: Fw: FYConsideration and Regional decision on appropriate action: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"
Importance: High

Jill - here's a sample of Mr. Floyd's comments; also to let you know (I had forgotten this) that he reached out to Tom Wall last summer.

He submitted at least 20 supporting documents for me to include in the 303d administrative record in 2016. I will spare you those - I think this email probably summarizes his concerns pretty well. By the time the state had done their monitoring, we had already issued our partial approval/overlisting action so couldn't really consider listing this waterbody in the 2016 list. (he submitted comments during our overlisting public comment period).

I've been coordinating with my monitoring and standards folks here but we aren't sure we have a strong enough case to request the state consider listing. Let me know if you have any ideas.

good luck!
Marion

From: Wall, Tom
Sent: Thursday, July 27, 2017 2:40 PM
To: Benante, Joanne; Danois, Gracy R.; Hopkins, Marion; Havard, James; Monschein, Eric
Subject: FYConsideration and Regional decision on appropriate action: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

From: Bill Floyd [mailto:wcbfloyd@ix.netcom.com]

Sent: Thursday, July 27, 2017 1:51 PM

To: Wall, Tom <Wall.Tom@epa.gov>

Cc: wcbfloyd@ix.netcom.com

Subject: RE: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Importance: High

Mr. Wall,

Thank you for confirming the origin of the Section 303(d) listing guidance exists with the Watershed Restoration, Assessment, and Protection Division, and for explaining how the EPA's Water Quality Standards handbook constitutes the work product of the Office of Science and Technology. The reason why the Chattooga River (Outstanding National Resource Water) needs to be properly classified as impaired today, as opposed to some point in the future, is the need to do something to abate the massive amount of embedded sediment that has impounded upstream of the large logjam referenced in our call. Upstream of this logjam, which is located at 35.033897, -83.128544, an excessive amount of small particle sized sandy sediments (<2mm) have embedded the stream bed's larger substrates. The physical evidence of this fact is indisputable. I would direct you to go to Google Earth and use the April 2014 imagery to fly to this location, and to move up and downstream from that point. While remotely located, the damage associated with this excessive embedded sediment is quite remarkable.

Based on the aforementioned EPA sources of internal guidance and the Water Quality Standards Handbook, I continue to believe that the once outstanding trout habitat and rainbow, brook, and brown trout fisheries on this extended segment of the Chattooga constitute special subcategories of ORW water quality use that have impermissibly suffered non-temporary degradation. It remains my purpose to see that the responsible agencies list this water quality limited segment as impaired, so that we might all coalesce around a common objective of abating this sediment before it gets released downstream to foul that part of this once outstanding trout stream.

Although the precise quantity of embedded sediment has not yet been measured by any of the responsible federal or state agencies, the quantity of embeddedness exceeds any reasonable minimum effects threshold for disrupting the early life cycle of trout on the Chattooga's headwaters. Were this impounded sediment to be released downstream, it would have devastating consequences for the trout habitat and trout fisheries.

As promised, I am sending you an adobe file that contains a series of photographs that I previously shared with Dr. Kaufmann in Corvallis, Oregon.

These photos provide close-ups of the conditions that you can fly over using Google Earth.

Thank you again for your time.

With best regards,

Bill Floyd

From: Wall, Tom [<mailto:Wall.Tom@epa.gov>]

Sent: Thursday, July 27, 2017 9:17 AM

To: Bill Floyd

Subject: RE: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Yes, that'll be fine, talk to you at noon.

Tom Wall, Director
Watershed Restoration, Assessment and Protection Division
Office of Wetlands, Oceans and Watersheds
U.S. EPA
Wall.tom@epa.gov
202/564-4179

From: Bill Floyd [<mailto:wcbfloyd@ix.netcom.com>]

Sent: Thursday, July 27, 2017 9:09 AM

To: Wall, Tom <Wall.Tom@epa.gov>

Cc: wcbfloyd@ix.netcom.com

Subject: RE: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Importance: High

Thank you for your prompt response. If appropriate, I will just presume to call you at 202 564 4179.

Bill Floyd

From: Wall, Tom [<mailto:Wall.Tom@epa.gov>]

Sent: Thursday, July 27, 2017 8:53 AM

To: Bill Floyd

Subject: RE: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Mr. Floyd, would noon today work for a call? Thank you,

Tom Wall, Director
Watershed Restoration, Assessment and Protection Division
Office of Wetlands, Oceans and Watersheds
U.S. EPA
Wall.tom@epa.gov
202/564-4179

From: Bill Floyd [<mailto:wcbfloyd@ix.netcom.com>]

Sent: Thursday, July 27, 2017 8:08 AM

To: Wall, Tom <Wall.Tom@epa.gov>

Cc: wcbfloyd@ix.netcom.com

Subject: EPA Promulgated Guidance: "Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions"

Importance: High

Director Wall,

Thank you in advance for your attention to my concerns. I support appropriate funding for the United States Environmental Protection Agency because it serves a critical role in protecting our waters.

However, to express frustration, I consumed several hours yesterday trying to get someone—anyone—within the Office of Wetlands, Oceans and Watersheds (OWOW) to pick up their phone, so that I might identify which office, department, individuals, etc. within OWOW, helped develop this recurring internal EPA guidance (referenced in the subject line of this email) regarding the Section 303(d) listing process for years 2016, 2014, etc. I am pressured by time critical deadlines to obtain answers to my questions.

This recurring Section 303(d) guidance was most recently promulgated on August 13, 2015 by now Acting Principal Deputy Assistant Administrator Best-Wong. For the 2014 cycle, similar guidance was issued under the signature of Ms. Denise Keehner, Director of OWOW.

Late yesterday, I spoke with a knowledgeable professional within the Office of Science and Technology. She identified your office as having knowledge about the development and promulgation of this guidance to the EPA's Regional offices.

Trusting this to be correct, would it be possible today, for you to set aside perhaps 30 minutes, to speak on the phone about the development of this guidance?

I face specific time deadlines for formulating written comments regarding the possible issuance of an NPDES permit in connection with a specific Outstanding National Resource Water located in my home state of North Carolina—an ONRW which exhibits an extended but *remotely located* segment of water **that should have been listed** as a water quality limited segment on the state of North Carolina's Section 303(d) list.

I would like to discuss specific aspects of this guidance, with the headquarters office, as it applies to my concerns about the degraded condition of the specifically designated uses of water quality of this ONRW and the prospective issuance of this NPDES permit. In particular, prior guidance has suggested that if the "data and information indicate that water is not meeting the State's requirement for maintenance and protection of the water quality of the ONRW under the *antidegradation* portion of its water quality standards,...the waters would be listed on the State's Section 303(d) list *even if* pollutant concentrations do not exceed water quality criteria levels." *Information Concerning 2014 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*, US EPA, Denise Keehner, Director, Office of Wetlands, Oceans, and Watersheds, Memo September 13, 2013 at page 5 (italics added).

Please advise of your availability to speak by phone. I will work my schedule to accommodate your time constraints.

With best regards,

Bill Floyd

Fw: Chattooga River: How North Carolina Appears to Be Circumventing the Federal Antidegradation Policy

Hopkins, Marion

Fri 5/3/2019 11:46 AM

Sent Items

To: Wetherington, Michele <Wetherington.Michele@epa.gov>;

thanks for your other message - I expect a meeting would be helpful. Let me touch bases with Gracy and others on Monday and see when might be a good time.

This message, below, while long, might be a little more succinct. I've been out this week and am playing catch up with emails.

From: bill floyd <wcbfloyd@ix.netcom.com>

Sent: Wednesday, May 1, 2019 5:32 PM

To: Fasselt, Veronica; Hopkins, Marion

Cc: wcbfloyd@ix.netcom.com

Subject: FW: Chattooga River: How North Carolina Appears to Be Circumventing the Federal Antidegradation Policy

Ms. Hopkins and/or Ms. Fasselt, could you please help me identify the statutory provision, regulation, or EPA water quality standards guideline that might justify North Carolina's vaguely stated position that there cannot be any impermissible degradation in a narrowly defined subcategory of designated use of ORW water quality **unless and until** the body of water has been placed on the Section 303(d) list of impaired waters?

The state of North Carolina has additionally suggested that the Chattooga's visibly obvious excessive bedded sediment problem cannot qualify for a non-point source grant pursuant to Section 319 (33 USC §1329) because North Carolina has failed to declare even a single segment of this river as a water quality limited segment or impaired segment of the river.

I remain unable to locate any definitive judicial opinion, CWA regulation, or Antidegradation handbook guideline issued by the US EPA which would validate North Carolina's stated position that a Section 303(d) listing constitutes a precondition for addressing the excessive bedded sediment problem that exists on the Chattooga.

I have repeatedly reviewed US Environmental Protection Agency (US EPA). 2012. *Water Quality Standards Handbook: Chapter 4: Antidegradation*. EPA-823-B-12-002. US EPA Office of Water, Washington, DC. Accessed May1, 2019. <https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter4.pdf>.

Water Quality Standards Handbook Chapter 4 - Antidegradation - US EPA

www.epa.gov

Water Quality Standards Handbook Chapter 4: Antidegradation The WQS Handbook does not impose legally binding requirements on the EPA, states, tribes or the regulated community, nor does it confer legal rights or

I cannot find any statement in this Chapter 4:Antidegradation guidance which might justify the state of North Carolina's counter-logical assertions that Section 319 grant money could not be employed to address the excessive bedded sediment problem being suffered by the Chattooga's wild trout populations.

The Chapter 4 Antidegradation handbook makes clear the US EPA's duty and authority: "EPA may disapprove and federally promulgate all or part of an implementation process for antidegradation if, in the judgment of the [Regional] Administrator, the State's process (or certain provisions thereof) can be *implemented in such a way as to circumvent the intent and purpose of the antidegradation policy*." Id. at p.3 (italics added).

Given the particular circumstances associated with the Chattooga, North Carolina *appears to be circumventing the federal antidegradation policy*.

North Carolina *continues to circumvent the intent and the purpose of the antidegradation policy* because of the way that NC DEQ has chosen to evaluate the degrading condition of the Chattooga's stream bed habitat and that habitat's decreased biological capacity for sustaining outstanding densities and/or biomass of wild trout populations.

NC DEQ continues to focus *exclusively* on the changing condition of macroinvertebrate despite knowing how the outstanding resource value that is supposed to be protected by the antidegradation mandate is the Chattooga's "*outstanding fish...habitat and fisheries*." 15A NCAC 02B.0225(b)(1)

NC DEQ continues to disregard the clear evidence of non-temporary decreases in the Chattooga's wild trout population—which NC DEQ documented in September 2016.

When properly implemented (as applied to Outstanding National Resource Waters or their North Carolina defined equivalent, Outstanding Resource Waters), the federal antidegradation policy is intended to serve as an early warning system.

The proper implementation of the antidegradation policy should compel relevant federal and state agencies to take immediate action to fix a water quality problem *long before* the ONRW body of water becomes so degraded as to require listing on the Section 303(d) list of impaired waters.

All of this raises serious doubts about how the Section 319 non-point source grant program is being administered.

There is a gap in North Carolina's implementation procedures that allows the state to disregard the best available science which has established a measurable minimum effects threshold for excessive bedded sediments.

EPA Region 10 has utilized this best available science to compel the state of Oregon to add streams to its Section 303(d) list.

Region 10 of the US EPA has acknowledged: "Bryce [Lominicky & Kaufmann] (2008 and 2010) determined the optimum sediment tolerance values and medians for areal % fines (≤ 0.06 mm) and areal sand and fines (< 2 mm). The median optima for percent sand and fines was 13% for sediment sensitive salmonids and 9.7% for sediment sensitive macroinvertebrates." 102814 EPA Region 10, G Hayslip, *Guidance re Use of Biological Data in 303d Listings* at p. 3.

It is difficult for me to understand why the US EPA refuses to apply a similar approach with respect to the ORW Chattooga River—a river where protecting the outstanding trout habitat and that habitat's reproductive capacity constitutes a narrowly defined subcategory of ORW water quality use.

I would appreciate it if you could work with your superiors to explain specifically why I am mistaken.

Many thanks.

Bill Floyd

From: Gannon, Rich [mailto:rich.gannon@ncdenr.gov]

Sent: Tuesday, April 30, 2019 4:43 PM

To: bill floyd; Bastakoti, Rishi

Cc: 'Fasselt, Veronica'; hopkins.marion@epa.gov; meiburgemc@gmail.com; Fransen, Tom; McNutt, Cam; Behm, Pamela; Karoly, Cyndi; Fleek, Eric; Tarver, Fred; Mcmillan, Ian; Jeff Manning (jp.manning@mindspring.com)

Subject: RE: [External] FW: Chattooga River

Mr. Floyd,

Since my program does not involve the kinds of monitoring issues and history you have covered through these messages, nor the larger CWA policy areas you raise, I've spoken with a few other staff, whom I'm including along with others whose program areas you touched on, to make them aware of this discussion. My general understanding from my consultations is that neither EPA's nor DWR's various monitoring efforts to date have revealed actionable water quality or habitat problems in the reaches of concern to you.

I did find out that the next round of Basin planning for the Savannah River Basin will be gearing up soon for a targeted 2021 Plan completion window. You may be interested in tracking and engaging in the associated sampling and plan development processes - <https://deq.nc.gov/about/divisions/water-resources/planning/basin-planning>. While most or all of your comments here have focused on instream concerns and not potential watershed drivers, an important part of the Basin planning process is to make management recommendations. And thinking further ahead to the development of a protection element within the 319/NPS program, and the potential for you to position these waters for funding under such an expanded program, I'll say from my perspective that in addition to identifying management needs, your cause will not only require a government or non-profit applicant, but your application would also very much benefit from the recruitment of as many like-minded local partners as possible. In fact I would say that's probably equally true for making headway in any funding or policy forum as you continue to press your case.

I hope this is helpful to you.

Regards,
-Rich

Richard W. Gannon
Supervisor, Nonpoint Source Planning Branch
NC Division of Water Resources
1611 MSC, Raleigh NC 27699-1611

(919) 707-3673

rich.gannon@ncdenr.gov

<https://deq.nc.gov/nps>

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From: bill floyd <wcbfloyd@ix.netcom.com>

Sent: Tuesday, April 30, 2019 10:18 AM

To: Gannon, Rich <rich.gannon@ncdenr.gov>; Bastakoti, Rishi <rishi.bastakoti@ncdenr.gov>

Cc: 'Fasselt, Veronica' <Fasselt.Veronica@epa.gov>; hopkins.marion@epa.gov; meiburgemc@gmail.com; Fransen, Tom <tom.fransen@ncdenr.gov>; McNutt, Cam <cam.mcnutt@ncdenr.gov>; Behm, Pamela <pamela.behm@ncdenr.gov>
Subject: RE: [External] FW: Chattoga River

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to report.spam@nc.gov

Mr. Gannon,

Thank you for providing an additional viewpoint to consider.

I do appreciate your response (as I am seeking solutions) but I whole heartedly cannot fathom the state of North Carolina's unmoving rationale for refusing to provide the mandated relief that is owed to the Chattooga's once outstanding but now degraded biological capacity for sustaining "outstanding" densities and/or biomass of naturally reproducing populations of rainbow, brown, and brook trout.

One problem, among many others, is that the state of North Carolina is not complying with its duty of maintaining "a continuous planning process" as it is required to do pursuant to 33 U.S.C. §1313(e) and 40 C.F.R. 130.5(a).

What could possibly be more important to North Carolina in administering "a continuing planning process" than recognizing and taking immediate action to abate the impermissible non-temporary degradation of a narrowly defined and subcategorized designated use of the water quality of an Outstanding Resource Water??

Based on my complaints (dating back to 2014) North Carolina must not continue to deny how the Chattooga's stream bed suffers from an excessive accumulation of bedded sediments, in quantities that exceed any reasonable minimum effects threshold for disrupting the spawning success of trout and early life cycle survival of trout alevein.

In response to my complaints (based on personal experience of having fly fished for trout on certain segments of this river for 3 decades) NC DEQ did agree to conduct a trout population study in September 2016—but then summarily declared that there wasn't any actionable problem taking place on the Chattooga's headwaters.

In September 2016, NC DEQ electrofished 8 different 600 foot reaches of the river at different locations where this bedded sediment is so pronounced. The results of that NC DEQ study were remarkably poor.

Despite sampling almost a mile of water, this study failed to capture a single *rainbow trout*—a remarkable piece of *clear evidence* of impermissible degradation from the baseline condition that existed back in 1987 when Rabun TU petitioned the state to reclassify these headwaters as Outstanding Resource Waters.

I can attest to having caught rainbows on this segment of the river in the past.

More importantly, the administrative histories of the United States Forest Service (1969 to 1974) and NC DEQ (1987 to 1989) substantiate that rainbow trout were once measurably present in this section of river at ORW reclassification.

Just as troubling, this September 2016 trout population study only managed to capture and release 26 young-of-the-year trout—a far cry from an outstanding trout population metric. This poor statistic constitutes the canary in the coal mine that has been disregarded by the relevant federal and state agencies.

Disappointingly, it appears that the relevant federal and state agencies appear prepared to stand pat on denying that there is any actionable continuing violation of the antidegradation mandate which is so visibly obvious as to be silly to deny.

Meaning no disrespect to you, it appears that the relevant agencies wish to stand behind a presumed agency expertise to redefine away the problem about which I complain.

To press my point, the United States Forest Service has tacitly admitted (in a published environmental assessment regarding the Southside Project) that there is a problem with excessive bedded sediment in Scotsman Creek—an important tributary to the main stem of the Chattooga. Scotsman Creek (which is designated ORW) and which previously possessed an outstanding brook trout fishery. This is no longer the case.

North Carolina should have recognized no later than 2016 how extended segments of these headwaters had become impaired in their ability to attain the narrowly defined subcategory of designated use of the Chattooga's ORW water quality at their baseline functional capacity.

Instead, we continue to debate the problem

I am now arbitrarily being deprived of the opportunity to seek a Section 319 non-point source grant to begin the process of salvaging a wild trout fishery—an outstanding wild trout fishery which previously prompted not only the river's ORW classification in 1989 but also its national Wild and Scenic River designation in 1974.

I remain unaware of any definitive judicial opinion or regulatory guidance issued by the US EPA which would validate the state of North Carolina's vaguely stated position that there cannot be any impermissible degradation in a narrowly defined subcategory of designated use of ORW water quality unless and until the body of water has been placed on the Section 303(d) list of impaired waters.

Ms. Hopkins and Ms. Fasselt, if I am mistaken, could you please cite the statutory provision, regulation, or water quality standards guideline that would demonstrate my misunderstanding?

Thank you for your kind consideration of my concerns. We can only reach a viable solution by working together. Unfortunately, it is the relevant agencies that must move to fix this problem. Unfortunately, you state that I am not qualified to receive a Section 319 grant to begin the process of restoring the Chattooga's once outstanding wild trout populations.

Bill Floyd

From: Gannon, Rich [mailto:rich.gannon@ncdenr.gov]

Sent: Monday, April 29, 2019 5:39 PM

To: bill floyd; Bastakoti, Rishi

Cc: 'Fasselt, Veronica'; hopkins.marion@epa.gov; meiburgemc@gmail.com; Fransen, Tom; Mcnutt, Cam; Behm, Pamela

Subject: RE: [External] FW: Chattoga River

Mr. Floyd,

I appreciate your clear desire to make headway on the problem you describe. To your question regarding the regulatory constraints on NC's 319 grant program, I will point you to EPA's current grant guidance that carries out the section of the Water Quality Act of 1987 that launched modern state Nonpoint Source Management Program requirements. EPA's guidelines were released in April 2013 and became effective in 2014 - <https://www.epa.gov/nps/319-grant-current-guidance> . EPA would be best to answer your question w.r.t. the regulatory force of the guidelines, but federal approval for a state to implement its 2014 or subsequent 5-year Nonpoint Source Program, including receiving its 319 grant allotment, is contingent on meeting the guidance to EPA's satisfaction. You'll find Section IV of the Guidance sets out the general framework of restoration expectations for 319 funds, and per my initial explanation below, it also describes how funds could potentially be used for protection pursuant to obtaining EPA approval of a state program revision.

I also appreciate your interest in pursuing 319 grant funding. You state below that you will submit a grant application, so let me say directly that you will not qualify at this point for a few practical reasons, and describe what the prospects are for potentially overcoming those barriers in the future: our program is not currently EPA-approved to fund watershed protection work; when we do seek and get such approval at some point, one important prerequisite to winning an award will be that a watershed plan be developed and approved by this program for the waterbody of concern; I have to say we don't yet know what other prerequisites might apply given we haven't designed the protection program; and administratively, the grant may only fund government and non-profit entities, so you would need to partner with one that is willing to lead as the P.I.. When you've made it that far, of course, your proposal would then compete against others for a limited annual funding pot, presumably the substantially smaller fraction (to restoration) of the annual pass-through amount.

As I mentioned below, we haven't yet attempted to develop a program protection element, and with our current staffing situation we're not in a position to pursue one. That said, we want to and intend to work toward that over the next couple of years (presently we're filling a vacancy that represents 50% of our 319 staff).

In short, the potential for you to obtain 319 funding for your work is at best likely several years off. While I'd like to have a positive pathway to offer you now, this is where we stand at this point.

Best,

-Rich Gannon

Richard W. Gannon
Supervisor, Nonpoint Source Planning Branch
NC Division of Water Resources
1611 MSC, Raleigh NC 27699-1611

(919) 707-3673

rich.gannon@ncdenr.gov

<https://deq.nc.gov/nps>

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From: bill floyd <wcbfloyd@ix.netcom.com>

Sent: Wednesday, April 24, 2019 6:35 PM

To: Gannon, Rich <rich.gannon@ncdenr.gov>; Bastakoti, Rishi <rishi.bastakoti@ncdenr.gov>

Cc: 'Fasselt, Veronica' <Fasselt.Veronica@epa.gov>; hopkins.marion@epa.gov;
wcbfloyd@ix.netcom.com; meiburgemc@gmail.com

Subject: RE: [External] FW: Chattoga River

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Mr. Gannon

Thank you for your kind response. If I understand correctly, you operate under the presumption that the state of North Carolina has some statutory or regulatory obligation which prevents the state from awarding any Section 319 grant unless the body of water which needs to be cleaned up has been placed on the Section 303(d) list of impaired waters.

Could you kindly provide me with the statutory or regulatory authority to which you refer in stating that Section 319 grants can only be awarded for addressing problems on streams that have been formally recognized by the state of North Carolina as being impaired and placed on the Section 303(d) list of impaired waters?

Unfortunately, such a position disregards the very essence of the antidegradation mandate which Congress codified in 1987...and which applies to the Chattooga's headwaters.

An Outstanding Resource Water can certainly suffer unlawful degradation in a narrowly designated and subcategorized use of ORW water quality long before that same body of water might be recognized as being impaired by a state regulatory agency.

The antidegradation mandate is intended to protect such subcategories of designated use of ORW water quality long before they become so fouled up that we have no practical ability to fix the problem.

The state of North Carolina and others would like to view impairment as a condition precedent for recognizing a violation of the antidegradation mandate...while the US EPA's own guidelines regarding antidegradation and narrowly defined designed uses of water quality would suggest otherwise.

North Carolina's confusion is inexplicable...North Carolina continues to disregard how protecting the Chattooga's unique biological capacity for sustaining "outstanding" densities and/or biomass of wild rainbow, brown, and brook trout constitutes a narrowly defined subcategory of designated use of the Chattooga's ORW water quality.

This designated use of ORW water quality was plainly stated and explicitly recognized in the administrative record leading up to ORW reclassification (1987-1989).

The Chattooga's trout habitat and its capacity for sustaining outstanding densities of wild trout must be provided with the intense antidegradation protections which Congress chose to codify at 33 U.S.C. §1313(d)(4)(B) as that codified mandate has been further informed by 40 C.F.R. §131.12(a)(3), 48 FR 51405, Nov. 8, 1983, as amended at 80 FR 51047, Aug. 21, 2015; *Water Quality Standards Handbook*, US EPA, Office of Water, Regulations and Standards, December 1983; *Water Quality Standards Handbook*, Chapter 4:Antidegradation, US EPA, Office of Water, EPA 823-B-94-005a (1994); *Water Quality Standards Handbook*, Chapter 2:Designation of Uses, US EPA, Office of Water, EPA 823-B-94-005a (1994); 15A NCAC 02B.0225(b)(1); 15A NCAC 02B.0201(a); 15A NCAC 02B.0201 (e).

Now, I told that I am to be disqualified from obtaining a Section 319 grant because the state of North Carolina refuses to acknowledge the measurable fact that the amount of sediment that has become embedded on the Chattooga's stream bed exceeds any reasonable minimum effects threshold for disrupting the spawning success and the early life cycle survival of the alevin of the naturally reproducing rainbow, brown, and brown trout that once reproduced themselves in outstanding numbers.

North Carolina disqualifies the Chattooga from receiving funds needed to clean up the sediment problem while refusing to accept the legal significance of the paucity of trout population data that NC DEQ collected after electrofishing 8 different 600 foot reaches (or a mile of water) in September 2016. Despite what your teammates in the Assessment Branch would like to assert based on claimed agency expertise, the proof is in the pudding.

The 2016 trout population study failed to capture even a single rainbow trout—a clear bright line indication of the impermissible degradation of the designated use of water quality that qualified the Chattooga for ORW classification in 1989.

Just as clear, this study only captured 26 young-of-the-year trout despite sampling almost a mile of water—something which even the most ardent apologist would have a difficult time claiming satisfies the obligation of sustaining "outstanding" densities and/or biomass of wild trout.

It appears the responsible agencies simply want to disregard this various obvious problem by redefining the rules.

I will be submitting a grant application because the Chattooga has suffered impermissible degradation in the narrowly defined subcategory of designed use of the stream's ORW water quality.

There is no need for this river to be placed on the Section 303(d) list before the responsible agencies turn their attention to fixing what is a visibly obvious problem.

Again, if I am mistaken, please do me the favor of providing me with the statutory or regulatory rule that precludes the state of North Carolina from moving forward to restore this stream's biological capacity for sustaining outstanding densities and/or biomass of wild trout populations. I can't find any such legal authority.

Thank you for your detailed response.

Bill Floyd

From: Gannon, Rich [mailto:rich.gannon@ncdenr.gov]
Sent: Tuesday, April 23, 2019 12:54 PM
To: Bastakoti, Rishi; bill floyd
Cc: 'Fasselt, Veronica'
Subject: RE: [External] FW: Chattoga River

Mr. Floyd,

I echo Rishi's appreciation for your concern over the quality of the Chattooga headwaters and their ability to support a robust fish community. I am following up with results of the investigation Rishi promised regarding the impairment status of the river as well as your concern for the lack of a watershed plan. Our Assessment Branch folks have confirmed that no segments of the Chattooga in NC have been determined to be impaired. This call is fundamental to the ability to obtain 319 funding – our pass-through grants are specifically constrained to implementation of management initiatives seeking to restore NPS-impaired waters. Without impairment, we have no way to fund improvement actions. Which also explains the lack of a watershed restoration plan. We certainly appreciate your interest in doing good work in the watershed, but the river simply doesn't qualify for this grant as currently structured.

Full disclosure – I will note that EPA has recently revised its guidance to open the door to states potentially using some portion of the grant to fund protection activities. However so far this has been heavily qualified and effectively geared to states like Maine with a lot fewer impaired waters and a much more protection-weighted management focus. It requires a state NPS Program change approved by EPA, which we haven't attempted to develop and currently are not in a position to pursue. Sorry I can't be more encouraging on this subject.

Again, thanks for continued focus on Chattooga River quality.

Best,
-Rich Gannon

Richard W. Gannon

Supervisor, Nonpoint Source Planning Branch
NC Division of Water Resources
1611 MSC, Raleigh NC 27699-1611

(919) 707-3673

rich.gannon@ncdenr.gov

<https://deq.nc.gov/nps>

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From: Bastakoti, Rishi

Sent: Monday, April 22, 2019 5:26 PM

To: bill floyd <wcbfloyd@ix.netcom.com>; Gannon, Rich <rich.gannon@ncdenr.gov>

Cc: 'Fasselt, Veronica' <Fasselt.Veronica@epa.gov>

Subject: RE: [External] FW: Chattoga River

Dear Mr. Floyd,

Thank you very much for reaching out to us. We highly appreciate your environmental protection interest and concern about the impairment issues in Chattooga river. I will review the background information you provided and will also consult with concerned staff members regarding the water quality impairment issues of Chattooga river.

As requested, please find the detail information on FY19 319 Grant Application. The deadline for application submission is May 3, 2019. Please have a quick look on the Grant RFP and Grant Review Criteria before preparing the application.

<https://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/319-grant-program#Application>

2019 319 Grant Application Materials

DWR is seeking proposals for award of federal fiscal year 2019 319(h) grant funds to implement watershed restoration plans that will help restore waters impaired by nonpoint sources of pollution.

For FY 2019, NC expects to receive \$1.2 Million from the USEPA for competitive funding of watershed restoration projects under Section 319(h) of the Clean Water Act. DWR will accept applications for FY2019 319 funding until May 3, 2019.

[2019 319 Grant RFP](#)

[2019 319 Grant Application](#)

[2019 319 Grant Review Criteria](#)

Thank you once again for your interest.

Rishi Bastakoti

From: bill floyd [mailto:wcbfloyd@ix.netcom.com]
Sent: Friday, April 19, 2019 6:56 AM
To: Gannon, Rich <rich.gannon@ncdenr.gov>; Bastakoti, Rishi <rishi.bastakoti@ncdenr.gov>
Cc: wcbfloyd@ix.netcom.com; 'Fasselt, Veronica' <Fasselt.Veronica@epa.gov>
Subject: [External] FW: Chattooga River

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Mr. Bastakoti and Mr. Gannon

I am interested in trying to apply for a Section 319 Grant for the current year for the Chattooga River—which constitutes 1 of just 3 streams out of over 12,000 bodies of water in North Carolina to carry an Outstanding Resource Waters classification as well as a national Wild and Scenic Rivers designation.

I am disadvantaged from successfully competing for a grant because I cannot find any watershed plans that pertain to the Chattooga's headwaters and which make mention of the excessive bedded sediment problem that has been documented on the Chattooga's headwaters since 2014.

See the explanation below—given to Ms. Veronica Fasselt (US EPA) —regarding the absence of up to date watershed planning information pertaining to the Chattooga's headwaters. I am including two salient documents that provide support for my concern that excessive bedded sediments have caused the non-temporary diminishment in the densities and/or biomass of wild trout on the Chattooga.

I would like to try to file a request for a Section 319 grant for this year—in the short period of time that remains.

Can you help to provide me with the necessary application documents? When is the deadline for applying?

Thank you.

Bill Floyd

From: bill floyd [mailto:wcbfloyd@ix.netcom.com]
Sent: Friday, April 19, 2019 5:42 AM
To: 'Fasselt, Veronica'
Cc: 'Nuhfer, Mark'; 'Rishi Bastakoti'; 'Hopkins, Marion'; anicholas@fs.fed.us; karney@fs.fed.us; wcbfloyd@ix.netcom.com
Subject: RE: Chattooga River

Ms. Fasselt,

Thank you for taking the time to respond...

I appreciate the collective efforts of professionals such as yourself in protecting water quality and in defending important codified mandates such as the antidegradation mandate.

To clarify...I am interested in working with anybody and everyone to achieve the objective of abating the excessive bedded sediment problem that currently exists on the Chattooga's headwaters in North Carolina.

However, there seem to be numerous obstacles being created by the responsible agencies (whose participation is needed to solve the problem) which continue to prevent these agencies from collectively or individually recognizing the excessive bedded sediment problem that plaques these headwaters—as well as the ongoing violation of the antidegradation mandate which Congress codified in 1987 as that federal antidegradation mandate applies to Outstanding National Resource Waters or their state equivalent named waters. In North Carolina, this consists of “Outstanding Resource Waters” (“ORW”).

The sediment transport capacity on the Chattooga's headwaters is insufficient to clear up the bedded sediment mess which I showed to you in the compilation of emails attached to my prior email.

This excessive bedded sediment has visibly decreased the suitable spawning and early life cycle trout habitat.

This increased accumulation of bedded sediment has contributed to a concomitant non-temporary decline in the densities and/or biomass of naturally reproducing rainbow, brown, and brook trout on North Carolina's headwaters.

This non-temporary decrease in the Chattooga's trout population densities and biomass was documented by a September 2016 trout population study conducted by NC DEQ—when contrasted against a five year study (1992_1996) conducted by the United States Forest Service in coordination with the North Carolina Wildlife Resources Commission.

The NC DEQ 2016 study sampled 8 different 600 foot reaches of the river upstream of Bull Pen Iron Bridge—almost a mile of water studied. I have attached the summary of that study prepared by NC DEQ. I have attached an excerpt from the report that provides the raw data collected in the 2016 study and the full 1992-1996 study report (00-T Borawa and Clemmons).

This study only managed to collect 26 young-of-the-year trout (note: the report totals do not agree with the sum of the eight individual sites).

More significantly, **not a single rainbow trout was collected.**

Various administrative records indicate the presence of rainbow trout and brook trout on the main stem of the Chattooga in the past.

I have personally photographed multiple rainbow trout that I have caught prior to the September 2016 study...

All of this documentation mathematically evidences how there has been impermissible degradation in the narrowly defined subcategory of designated use of the Chattooga's ORW water quality.

As I currently understand the process, I believe that US EPA has oversight for making sure that Section 319 grants are being properly allocated by the state of North Carolina.

My problem is that neither the Savannah River basin plan nor any smaller HUC 14 watershed plan (of which there are 8 local watersheds according to NC DEQ(DMS planning website)) appear to make any reference to the excessive bedded sediment problems being suffered in the main stem of the river or in critical tributaries such as N. Fowler Creek and Scotsman Creek—despite the copious amounts of evidence of a problem that has been placed into the administrative records of the United States Forest Service, the state of North Carolina, and perhaps the United States Environmental Protection Agency since 2014.

Without stating so, the United States Forest Service has tacitly admitted in its Southside project details that there is a bedded sediment problem on Scotsman Creek—although the agency has not admitted the full intensity and reach of the problem that is occurring on Scotsman Creek.

The bedded sediment problem on Scotsman Creek is bank to bank and clearly excessive based on the best available science. As an example of the best available science please see Suttle, Power, Levine & McNeely, *How Fine Sediment in Riverbeds Impair Growth and Survival of Juvenile Salmonids*, Ecological Applications, 14(4):969-974 (2004)(“The linear relationship between deposited fine sediment and juvenile steelhead growth *suggests that there is no threshold below which exacerbation of fine-sediment delivery and storage in gravel bedded rivers will be harmless*, but also that any reduction could produce immediate benefits for salmonid restoration”)(italics added).

See also . See Bryce, Lomnický & Kaufmann, *Protecting sediment-sensitive aquatic species in mountain streams through the application of biologically based streambed sediment criteria*, Journal of North American Benthological Society, 29(2):657-672 (June 2010)(“Combining all lines of evidence, we concluded that for sediment-sensitive aquatic vertebrates, minimum-effect sediment levels were 5% [for ≤.06mm fines] and 13% [for ≤2mm sand and fines], respectively, both expressed as areal percentages of the wetted streambed surface.”); Bryce, Lomnický, Kaufmann, McAllister, & Ernst, *Development of biologically-based sediment criteria in mountain streams of the western United States*. North American Journal of Fisheries Management 28:1714–1724 (2008).

Ms. Fasselt, the Chattooga's headwaters constitute 1 of just 3 streams (out of 12,000 bodies of water in North Carolina) to carry dual Outstanding Resource Waters classification in combination with a national Wild and Scenic River designation.

If ever there were a case where all of the federal and state agencies ought to be coming together to fix a visibly obvious excessive bedded sediment problem—the Chattooga constitutes that case.

Nevertheless, I am unlikely to succeed in obtaining a Section 319 grant to work towards the goal of achieving relief for this unique wild trout stream—simply because the relevant state and federal agencies have declined to acknowledge the excessive bedded sediment problem .

This is so because North Carolina has changed the frequency of its river basin planning updates—it is now every ten years instead of five year.

The last update of the Savannah River Basin Plan was in 2012 so a new plan will not be prepared until 2021. The 2012 plan makes no mention of the river's excessive bedded sediment problems.

Additionally the last modification of the Savannah River Basin Restoration Priorities plan ("RBRP") was updated in 2018 but it contains no mention of either the excessive bedded sediment problem or the paucity of young of the year trout that were captured in the NC DEQ September 2016 trout population .

In other words, I am prejudiced from succeeding in a highly competitive grant approval process because the relevant agencies have made no effort to update their records of the degradation that is ongoing.

I would admit to not understanding all of the administrative niceties. However, I find this Catch-22 to be remarkably frustrating.

I can not hope to win a grant unless I can point to an urgent problem that needs to be solved.

I can not point to the existing administrative record to prove that need because the state of North Carolina has failed to reflect this visibly obvious problem of excessive bedded sediments in its administrative record.

The simple fact remains that collectively we continue to create administrative obstacles which serve to avoid admitting this problem and which prevent the Chattooga's narrowly defined subcategory of designated use of ORW water quality from receiving the antidegradation protections that the law compels to be provided.

Instead, we ignore how the United States Forest Service has made this problem worse by management initiatives approved in January 2012.

It seems wrong that we would allow this river to fall into the crack because of administrative inconsistencies.

The circumstances associated with the Chattooga belies that the state of North Carolina may not have been adequately doing their job in properly allocating its Section 319 grant program.

I am trying to find a solution for the diminishment of a trout stream with which I have thirty years of connection.

If ever there were a case where Section 319 funding should be allocated, the Chattooga's ORW and Wild and Scenic River headwaters constitutes the case—and yet the responsible agencies have not adequately recognized the problem so I am unlikely to succeed in asking for a grant to begin the process of removing this excessive bedded sedimentation.

I appreciate your time and consideration of my concerns. I will do my part to try to resolve this problem—but the responsible federal and state agencies must admit there is an actionable problem.

We should not be misallocating grants due to improper non-disclosure or delayed disclosure of critical information.

Many thanks.

Bill Floyd

From: Fasselt, Veronica [<mailto:Fasselt.Veronica@epa.gov>]
Sent: Thursday, April 18, 2019 1:48 PM
To: bill floyd
Cc: Nuhfer, Mark; Rishi Bastakoti (rishi.bastakoti@ncdenr.gov); Hopkins, Marion; Fasselt, Veronica
Subject: RE: Chattooga River

Hi Mr. Floyd:

Thank you for your interest in water quality of the Chattooga River. I appreciate your effort to provide me with historic information and photos. With our Section 319 nonpoint source grants, states take the lead in selecting individual projects for competitive funding. I encourage you to continue to work with Rishi Bastakoti regarding your options.

Sincerely,
Veronica Fasselt
Watershed Coordinator
Sustainable Communities and Watersheds Branch
U.S. Environmental Protection Agency, R4
Atlanta Federal Center – Mail Code: 9T25
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960
(404) 562-9471
Fasselt.veronica@epa.gov

From: bill floyd <wcbfloyd@ix.netcom.com>
Sent: Wednesday, April 17, 2019 6:07 PM
To: Fasselt, Veronica <Fasselt.Veronica@epa.gov>
Cc: wcbfloyd@ix.netcom.com
Subject: Chattooga River

Ms. Fasselt

Thank you for your time. Mr. Bastakoti is new to his position and I will need to follow up with him by email. He wasn't able to answer over the phone whether or not a watershed plan exists for the Chattooga.

Independently, I did manage to hunt down the Savannah River Basin Restoration Priorities Amended July 2018—which is extremely disappointing in its failure to acknowledge any of the history that I shared with you about the Chattooga.

I'm not that this qualifies as the watershed plan although it appears to relate to a HUC 8 unit.

It is disappointing to see that NC DEQ has ignored all of the effort put in to advise the agency of the excessive bedded sediment problem which exists on the Chattooga's headwaters and the concomitant adverse impact that this sediment has had on the once outstanding trout habitat and outstanding densities and biomass of wild trout.

I am sending you a copy of the Savannah Plan and a compilation of annotated photos (taken by me) which evidences the sediment problem being suffered by this ORW stream.

I am also sending you the original Rabun TU petition for ORW reclassification (1987) (N-22) and the North Carolina administrative document (A-2) at p. 5-8 which demonstrate the importance of the "outstanding" trout habitat and "outstanding" trout fisheries as the Chattooga's narrowly defined subcategory of designated use of the stream's ORW water quality .

Not a word of mention is made in this watershed plan about the paucity of population metrics documented by the NC DEQ September 2016 study of trout on these headwaters.

How can a proper allocation of Section 319 funding be achieved if the agency administering the grant program simply ignores a visibly obvious excessive embedded sediment problem?? It can't.

The Chattooga constitutes 1 of 3 streams (out of 12,000 bodies of water) to carry an Outstanding Resource Waters classification in addition to a national Wild and Scenic River designation.

NC DEQ's September 2016 study of the stream's trout populations tell the tale of degradation.

NC DEQ only captured 26 young of the year trout despite sampling 8 different six hundred foot reaches(or almost 1 mile of river).

We have an antidegradation problem.

Substantial Section 319 funds should be devoted to restoring this habitat and removing this sediment.

The state of North Carolina should be encouraged by the EPA to recognize the bedded sediment and concomitant non-temporary decreases in the wild trout populations on the Chattooga

Can the EPA help?

Bill Floyd

Re: Chattooga River Water Quality Problems

Hopkins, Marion

Fri 6/23/2017 9:23 AM

Sent Items

To: Wetherington, Michele <Wetherington.Michele@epa.gov>;

Categories: Record Saved - Shared

It's pretty crazy - I'm just wish I knew what to do about this one...

From: Wetherington, Michele
Sent: Thursday, June 22, 2017 3:21 PM
To: Hopkins, Marion
Subject: RE: Chattooga River Water Quality Problems

I had to look up "creekboating" and that is terrifying

Michele

Michele Wetherington
Associate Regional Counsel
U.S. EPA, Region 4
61 Forsyth Street S.W. Atlanta, GA 30303
(404) 562-9613

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From: Hopkins, Marion
Sent: Thursday, June 22, 2017 9:38 AM
To: Danois, Gracy R. <Danois.Gracy@epa.gov>
Cc: McArthur, Chris <mcarthur.christopher@epa.gov>; Decker, Chris <Decker.Chris@epa.gov>; Petter, Lauren <Petter.Lauren@epa.gov>; Wetherington, Michele <Wetherington.Michele@epa.gov>
Subject: FW: Chattooga River Water Quality Problems
Importance: High

FYI: Some highlights from Mr. Floyd's email to FS:

5

The USFS has attempted to treat this broader plan of development and land disturbance as separate unrelated site specific activities. It is my opinion that they have done so to avoid the net of the Clean Water Act's antidegradation mandate.

I have already tendered an objection to Ms. Marion Hopkins, US EPA Region 4 to complain that the impacted segment of the Chattooga River should have been placed on the 2016 Section 303(d) list of impaired waters.

I am also trying to encourage Ms. Hopkins to work with me towards a compromise of having the USFS adopt a sufficiently intense *Standard* in its forthcoming Land Resource Management Plan that puts in place a *minimum effects threshold* for when embedded sediments would be deemed disruptive of the early life cycle of trout. Such a minimum effects threshold would be patterned after the approach taken by EPA Region 10 with respect to the state of Oregon.

I appreciate your understanding of the limitations that I face in trying to push this boulder uphill. I hope that the US EPA can avoid the stonewalling that I have experienced here to date by the USFS and certain agencies within the state of North Carolina.

From: Bill Floyd [mailto:wcbfloyd@ix.netcom.com]
Sent: Thursday, June 22, 2017 7:07 AM
To: Hart, Rachel <hart.rachel@epa.gov>
Cc: wcbfloyd@ix.netcom.com; Hopkins, Marion <Hopkins.Marion@epa.gov>
Subject: Chattooga River Water Quality Problems
Importance: High

Ms. Hart,

I apologize. Last night, I neglected to provide you with a copy of the Forest Service's two Environmental Assessment and Record of Decisions from January 2016 (Paddler Trail Construction) and January 2012 (Lifting of the Ban on Creekboating on the Chattooga's headwaters) about which we spoke.

In this email am sending you a copy of the 2015 Trail Construction EA and the accompanying January 2016 Record of Decision ("fseprd488235").

Due to concerns about the size of the files attached, could you please confirm your receipt of this email?

The 2015 EA evidences public comments identifying many of the issues about which I complain.

The 2012 EA ("Mang Rec. Uses Upper Chattooga stelprdb535042") and Record of Decision (01312012stelprdb5350464) evidence the conclusory and neglectful way in which the USFS considered its obligations under the Clean Water Act.

Run a Boolean search for "Sediment" in the 2012 EA. You will get over 320 hits for this word. But I don't think you will find any robust discussion of any Erosion and Sedimentation Control Plan...etc.

The discussion is entirely conclusory in repeatedly telling the public that all will be ok. The simple truth is that neither the USFS nor the state of North Carolina have made any effort to assess the actual impacts on the aquatic environment subsequent to the introduction of creekboating in 2012.

Coupled with other documents that I plan to inject into the Forest Service's administrative record, these environmental documents (in particular the 2015 EA) substantiate how the ongoing disturbance of the Chattooga's fragile and highly erosive trout buffer (soils are predominantly micaceous) has caused damage. The continuing development of an ever changing crazy quilt of boat launch sites, river evacuation points, and portage trails are part of a larger plan of infrastructure development that may not have been properly permitted.

To the best of my knowledge, there is no evidence in the record of an antidegradation assessment ever having been conducted. I am also unaware of the published existence of any Section 401 water quality certification associated with any of these land disturbing activities.

From my perspective, the USFS has impermissibly attempted to segregate the cumulative negative water quality impacts associated with the development of this recreational infrastructure.

The USFS has attempted to treat this broader plan of development and land disturbance as separate unrelated site specific activities. It is my opinion that they have done so to avoid the net of the Clean Water Act's antidegradation mandate.

As can be seen from reviewing the Forest Service's Environmental Assessments, all of these policy reversals have been pushed forward without ever undertaking any due diligence to make sure that the USFS has complied with its stormwater obligations etc.

The USFS, as owner of the land on which the development of this recreational infrastructure and land disturbance is occurring, should not be allowed to deny any responsibility for the damage that has resulted from its decision to lift the ban on creekboating the headwaters in North Carolina.

I have volunteered a significant amount of time to digging out the facts needed to ask our regulators to provide this ORW body of water with the mandated intensity of antidegradation protection owed to the Chattooga's trout habitat and trout fisheries.

I simply must push for the attention of our federal and state regulators.

I am still looking for compromise.

However, administrative time constraints grow short. They pressure me. So far, none of the state or federal agencies have shown any interest in acknowledging the trout habitat degradation problem that is so visibly obvious to anyone who cares to look at the photographs that I have provided, and for which the negative impacts are so evident in the results of the September 2016 trout population study conducted by NC DEQ.

If I had not complained for almost two years, neither the USFS nor NC DEQ would have ever conducted this revealing September 2016 trout population study.

I continue to hope that the US EPA, the USFS, and the state of North Carolina might agree to work with me to eliminate the excessive embedded sediment problem and to make sure that the Chattooga's trout

habitat and trout fisheries are provided with the legally mandated level of antidegradation protection owed to them.

I look forward to a dynamic conversation about my concerns over impermissible discharges into the Chattooga's headwaters.

To close, as I advised yesterday, I have already tendered an objection to Ms. Marion Hopkins, US EPA Region 4 to complain that the impacted segment of the Chattooga River should have been placed on the 2016 Section 303(d) list of impaired waters.

I am also trying to encourage Ms. Hopkins to work with me towards a compromise of having the USFS adopt a sufficiently intense *Standard* in its forthcoming Land Resource Management Plan that puts in place a *minimum effects threshold* for when embedded sediments would be deemed disruptive of the early life cycle of trout. Such a minimum effects threshold would be patterned after the approach taken by EPA Region 10 with respect to the state of Oregon.

I appreciate your understanding of the limitations that I face in trying to push this boulder uphill. I hope that the US EPA can avoid the stonewalling that I have experienced here to date by the USFS and certain agencies within the state of North Carolina.

With best regards,

Bill Floyd